

CLAIMS

1. A print head for a printing system, the print head being configured to print in a first direction and a second direction, the first direction and the second direction being nonparallel, the print head comprising:

an ejector base; and

a first plurality of ejectors mounted in the ejector base, the first plurality of ejectors being arranged in a first line, the first line being diagonal to the first direction and the second direction.

2. The print head of Claim 1, wherein the first direction and the second direction are orthogonal.

3. The print head of Claim 2, wherein the first line is at a 45° angle with respect to the first direction and the second direction.

4. The print head of Claim 1, wherein the print head is configured to print an IC pattern, wherein a first spacing between each of the first plurality of ejectors in the first direction is an integer multiple of a first design rule of the IC pattern, and wherein a second spacing between each of the first plurality of ejectors in the second direction is an integer multiple of a second design rule of the IC pattern.

5. The print head of Claim 4, wherein the first design rule is the same as the second design rule.

6. The print head of Claim 1, further comprising a second plurality of ejectors mounted in the ejector base, the second

plurality of ejectors being arranged in a second line, the second line being parallel to the first line, wherein each of the first plurality of ejectors and the second plurality of ejectors has a unique position in the first direction.

7. The print head of Claim 6, further comprising a third plurality of ejectors mounted in the ejector base, the third plurality of ejectors being arranged in a third line, the third line being parallel to the first line, wherein each of the first plurality of ejectors and the third plurality of ejectors has a unique position in the second direction.

8. The print head of Claim 1, wherein the plurality of ejectors are configured to print a phase change material for a semiconductor process mask.

9. The print head of Claim 1, wherein the plurality of ejectors are configured to print a solution-processable electronic materials to form an integrated circuit.